

The embodiments of the invention in which an exclusive property right or privilege is claimed are defined as follows:

1. A ball and toggle assembly adapted for use in an interior, prismatic, day/night rearview mirror assembly of a vehicle, comprising:
a body member having a ball member and a base, said body member being formed from a first polymeric material comprising a first flexural modulus; and
5 a toggle member comprising a hinge and an actuator tab, said toggle member formed from a second polymeric material comprising a second flexural modulus, said body member and said toggle member being joined together for support in a mirror housing of the rearview mirror assembly, said first flexural modulus being greater than said second flexural modulus.
2. The ball and toggle assembly of Claim 1, wherein said first polymeric material of said body member comprises one of a thermoplastic and a thermoset.
3. The ball and toggle assembly of Claim 2, wherein said first polymeric material of said body member comprises a filled polymeric resin.
4. The ball and toggle assembly of Claim 3, wherein said first polymeric material comprises a filled polymeric resin having a resin rich surface.
5. The ball and toggle assembly of Claim 2, wherein said second polymeric material of said toggle member comprises a polyolefin.
6. The ball and toggle assembly of claim 5, wherein said second polymeric material comprises at least one of a homopolymer polypropylene and a copolymer polypropylene.
7. The ball and toggle assembly of Claim 1, wherein said second polymeric material of said toggle member comprises a polyolefin.
8. The ball and toggle assembly of claim 7, wherein said second polymeric material comprises at least one of a homopolymer polypropylene and a copolymer polypropylene.

9. The ball and toggle assembly of Claim 1, wherein said first flexural modulus of said first material is greater than approximately 500,000 p.s.i.
10. The ball and toggle assembly of Claim 1, wherein said first flexural modulus of said first polymeric material is greater than approximately 1,000,000 p.s.i.
11. The ball and toggle assembly of Claim 1, wherein said first flexural modulus of said first polymeric material is greater than approximately 1,500,000 p.s.i.
12. The ball and toggle assembly of Claim 9, wherein said second flexural modulus of second polymeric material is less than approximately 200,000 p.s.i.
13. The ball and toggle assembly of Claim 1, wherein a ratio of said first flexural modulus of said first polymeric material to said second flexural modulus of said second polymeric material is greater than approximately three.
14. The ball and toggle assembly of Claim 1, wherein a ratio of said first flexural modulus of said first polymeric material to said second flexural modulus of said second polymeric material is greater than approximately five.
15. The ball and toggle assembly of Claim 1, wherein a ratio of said first flexural modulus of said first polymeric material to said second flexural modulus of said second polymeric material is greater than approximately seven.
16. The ball and toggle assembly of Claim 1, wherein said second polymeric material of said toggle member has a shrinkage factor of at least approximately 0.005 inch/inch and said first polymeric material of said body member has a shrinkage factor of less than approximately 0.002 inch/inch.
17. The ball and toggle assembly of Claim 1, wherein said toggle member is molded at least partially around said body member.

18. The ball and toggle assembly of Claim 17, wherein said body member includes a plurality of through openings, said toggle member being molded in said through openings to mechanically secure said toggle member to said body member.
19. The ball and toggle assembly of Claim 1, wherein said assembly is molded in a two step process, said body member being molded in a first step and said toggle member being molded at least partially about said body member in a second step.
20. The ball and toggle assembly of Claim 19, wherein said two step molding process is performed by one of a rotatable mold, a single mold, and separate molds.
21. The ball and toggle assembly of Claim 1, wherein said body member and said toggle member are integrally molded together.
22. The ball and toggle assembly of Claim 1, wherein said body member further comprises an upper pivot joint for pivotally engaging a support when mounted in the mirror housing.
23. The ball and toggle assembly of Claim 1, wherein said ball member is connected to said base via a neck portion, said neck portion being tapered such that said neck portion narrows at an outer end toward said ball member.
24. The ball and toggle assembly of Claim 1, wherein said toggle member further comprises a biasing member, said biasing member being integrally formed with said toggle member, said biasing member being operable to exert a biasing force at said hinge to resist movement of said actuator tab from at least one of a day and night position.
25. The ball and toggle assembly of Claim 1, wherein said body member and said toggle member are formed in a matching color.
26. The ball and toggle assembly of Claim 25, wherein said matching color matches a color of the mirror housing of the rearview mirror assembly.
27. The ball and toggle assembly of Claim 1, wherein said base of said body member includes at least one rib for enhanced vibration performance.

28. The ball and toggle assembly of Claim 1, wherein said ball member of said body member is cored.

29. An interior rearview mirror assembly for vehicles, comprising:

a mirror housing having a forward surface;

a prismatic, reflective mirror element supported by said mirror housing, said mirror housing and said prismatic mirror element being pivotable relative to the vehicle between a first reflectivity position and a second reflectivity position; and

a ball and toggle assembly mountable to said housing and comprising:

a body member including a mounting member and a base, said body member being pivotally mounted in said mirror housing; and

a toggle member including a hinge and an actuator tab, said toggle member being pivotally mounted in said mirror housing adjacent to said body member, said ball and toggle assembly being operable such that movement of said actuator tab about said hinge causes pivotal movement of said mirror housing and said reflective mirror element between said first and second reflectivity positions relative to said mounting member, wherein said body member comprises a first polymeric material having a first flexural modulus and said toggle member comprises a second polymeric material having a second flexural modulus, said first flexural modulus being greater than said second flexural modulus, said body member and said toggle member being joined together.

30. The interior rearview mirror assembly of Claim 29, wherein said first polymeric material of said body member comprises one of a thermoplastic and a thermoset.

31. The interior rearview mirror assembly of Claim 30, wherein said first polymeric material of said body member comprises a filled polymeric resin.

32. The interior rearview mirror assembly of Claim 31, wherein said first polymeric material comprises a filled polymeric resin having a resin rich surface.

33. The interior rearview mirror assembly of Claim 30, wherein said second polymeric material of said toggle member is different from said first polymeric material, said second polymeric material including at least one of a polyolefin and a thermoplastic.

34. The interior rearview mirror assembly of claim 33, wherein said second polymeric material includes at least one of a homopolymer polypropylene and a copolymer polypropylene.

35. The interior rearview mirror assembly of Claim 29, wherein said second polymeric material of said toggle member is different from said first polymeric material, said second polymeric material including at least one of a polyolefin and a thermoset.

36. The interior rearview mirror assembly of Claim 35, wherein said second polymeric material includes at least one of a homopolymer polypropylene and a copolymer polypropylene.

37. The interior rearview mirror assembly of Claim 29, wherein said first flexural modulus is greater than approximately 500,000 p.s.i.

38. The interior rearview mirror assembly of Claim 29, wherein said first flexural modulus is greater than approximately 1,000,000 p.s.i.

39. The interior rearview mirror assembly of Claim 29, wherein said first flexural modulus is greater than approximately 1,500,000 p.s.i.

40. The interior rearview mirror assembly of Claim 37, wherein said second flexural modulus is less than approximately 200,000 p.s.i.

41. The interior rearview mirror assembly of Claim 29, wherein a ratio of said first flexural modulus of said first polymeric material to said second flexural modulus of said second polymeric material is greater than approximately three.

42. The interior rearview mirror assembly of Claim 29, wherein a ratio of said first flexural modulus of said first polymeric material to said second flexural modulus of said second polymeric material is greater than approximately five.

43. The interior rearview mirror assembly of Claim 29, wherein a ratio of said first flexural modulus of said first polymeric material to said second flexural modulus of said second polymeric material is greater than approximately seven.

44. The interior rearview mirror assembly of Claim 29, wherein said second polymeric material of said toggle member comprises a shrinkage factor of at least approximately 0.005 inch/inch and said first polymeric material of said body member comprises a shrinkage factor of less than approximately 0.002 inch/inch.

45. The interior rearview mirror assembly of Claim 29, wherein said mounting member is a ball member which is pivotally interconnectable to a mounting base secured to the vehicle such that said mirror is pivotable relative to said mounting base.

46. The interior rearview mirror assembly of Claim 29, wherein said body member and said toggle member are integrally molded together.

47. The interior rearview mirror assembly of Claim 29, wherein said toggle member is molded at least partially around said base of said body member and secured thereto via mechanical connection of said second polymeric material with said first polymeric material.

48. A mirror mount assembly adapted for mounting to an interior surface of a windshield of a vehicle and for pivotally mounting an interior rearview mirror assembly thereto, the vehicle having an interior cabin, said mirror mount assembly comprising:

a mounting base for mounting at the interior surface of the windshield, said mounting
5 base including a ball member for pivotal connection to the mirror assembly;
an accessory housing extending generally downwardly from said mounting base; and
at least one accessory positionable within said accessory housing.

49. The mirror mount assembly of Claim 48, wherein said at least one accessory comprises at least one of an illumination source, a microphone, an attachment member, a compass sensor, an antenna and an interface button.

50. The mirror mount assembly of Claim 48, wherein said at least one accessory comprises at least one illumination source.


51. The mirror mount assembly of Claim 50, wherein said at least one illumination source comprises at least one of a light emitting diode, an incandescent light, a neon light, a fluorescent light and a halogen light.

52. The mirror mount assembly of Claim 50, wherein said at least one illumination source is operable to provide illumination to a targeted area of the interior cabin of the vehicle.

53. The mirror mount assembly of Claim 52, wherein said accessory housing comprises a lens element which is operable to direct and focus illumination from said at least one illumination source toward the targeted area.

54. The mirror mount assembly of Claim 50, wherein said at least one illumination source comprises an indicator which is operable to convey a status signal of a vehicular system of the vehicle.

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